

REMARKS

Reconsideration of the present application is respectfully requested.

By the present Amendment, the subject application has been amended to address all of the matters raised in the Office Action of January 24, 2003.

Claim Rejections - 35 USC § 112

The Office Action of January 24, 2003 rejected Claims 24-26 under 35 USC § 112 as being indefinite as to whether the “product” is the same element as the “material transfer quick connect fitting device”. Claim 24 has been amended to recite the “material transfer quick connect fitting device”. Newly submitted Claim 33 contains the allowable subject matter of claim 26 and specifically recites the “material transfer quick connect fitting device”.

Allowable Subject Matter

By the present Amendment, Claims 11, 22, 25, and 26 have allowable subject matter as described in the Conclusion of the Office Action of January 24, 2003. Claims 11, 22, 25 and 26 have been canceled without prejudice. New independent claims 30-33 are presented herewith and claim the allowable subject matter. It is respectfully submitted that Claims 30-33 are allowable.

Claim Rejections - 35 USC §102

McNaughton et al. 5,324,082

Claims 1-10, 12-21, 23, 24, 27 and 29 have been rejected under 35 U.S.C. 102(b) as being anticipated by McNaughton (US Patent 5,324,082).

For a claim to be anticipated by a prior art reference, the reference must have each and every element as set forth in the claim. The identical invention must be shown in every detail. (MPEP Sec. 2131, pp. 2100-43). Moreover, the words of a claim must be given their plain

meaning. They must be read as they would be interpreted by those of ordinary skill in the art. MPEP, Sec. 2111.01, p.2100-26.

Claim 1 and Dependent Claims 2 - 10

The claims 1-10 of the present invention provide a refrigerant material transfer device which can be readily connected or disconnected to the connector on an automotive air conditioning system. This device provides for connecting a pressurized container to an automotive air conditioning system, transferring a refrigerant from a pressurized container, and disconnecting the pressurized container from the automotive air conditioning system. Providing for ready disconnection of the refrigerant material transfer device from the air conditioning connector allows the pressurized container to be disconnected from the automotive air conditioning system and use of the automobile resumed.

McNaughton does not provide for such ready disconnection as will be further described below. Once the arms 32 engage the upset portion 34 of the tube 22 in an assembled position shown in Fig. 6., there is no provision for retracting the arms so the tube 22 can be disconnected from the housing 24.

The McNaughton reference does not have the following identical elements shown in every detail as specified in claim 1:

A. A refrigerant material transfer device for transferring a refrigerant from a pressurized container to the connector on an automotive air conditioning system

B. An actuator adapted for attachment to a pressurized container for selectively receiving refrigerant material from the pressurized container,

C. A fluid conveying tube fluidically connecting the fitting and the actuator to allow the flow of refrigerant material from the actuator to the quick connect fitting,

D. A quick connect fitting having a one piece plastic body having one end attached to the tube and another end selectively attachable to and detachable from the air conditioning connector on the automotive air conditioning system,

E. A plastic locking sleeve mounted on the plastic body for selectively locking and unlocking the body to the air conditioning connector,

F. At least one locking tab moveable between a secured position in which the connector engaging lip is engageable by the air conditioning connector and an unlocked position, the body and the locking sleeve movable with respect to each other between a tab unlocking position and a tab locking position to lock the locking tabs in a secured position.

The following is a discussion of the McNaughton reference which does not have elements A - F described above.

Element A The present invention, as claimed in claim 1, provides a refrigerant material transfer device for transferring a refrigerant from a pressurized container to the connector on an automotive air conditioning system. The McNaughton reference does not provide for the transfer of refrigerant from a pressurized container to the connector on an automotive air conditioning system.

Element B The present invention, as claimed in claim 1, has an actuator adapted for attachment to a pressurized container for selectively receiving refrigerant material from the pressurized container. The McNaughton reference does not disclose any such actuator.

Element C The present invention as claimed in claim 1 provides a fluid conveying tube fluidically connecting the fitting and the actuator to allow the flow of refrigerant material from the actuator to the quick connect fitting. The McNaughton reference does not disclose the connection of an actuator to the fitting by such a tube.

Element D The present invention as claimed in claim 1 provides a quick connect fitting having a one piece plastic body having one end attached to the tube and another end selectively attachable to and detachable from the air conditioning connector on the automotive air conditioning system. The McNaughton reference does not disclose the detachment of the fitting.

In the January 24, 2003 Office Action, the Examiner referred to the housing 24 as the one piece plastic body of the present invention, the retainer 30 as the plastic locking sleeve of the present invention, and the arms 32 as the tabs for locking engagement with a fitting 22. The McNaughton fitting has arms 32 which are forced outwardly when the upset portion 34 of the tube 22 is moved towards the fully assembled position which is shown in Fig. 6. When the tube and arms are in the fully assembled position, the ends of the arms 32 are adjacent the upset portion 34 and the fitting and tube are not readily detachable. In fact there is no disclosure in McNaughton of detaching the fitting and tube or of disengaging the arms 32 from engagement with the upset portion 34. The present invention also provides for ready detachment by providing a movable sleeve described in Elements E and F below.

Element E The present invention as claimed in claim 1 provides a plastic locking sleeve mounted on the plastic body for selectively locking and unlocking the body to the air conditioning connector. McNaughton does not disclose a locking sleeve for selectively locking

and unlocking the body to the air conditioning connector. If the retainer 30 is read as the locking sleeve, it does not provide for unlocking the body from the connector.

Element F The present invention as claimed in claim 1 provides at least one locking tab moveable between a secured position in which said connector engaging lip is engageable by the air conditioning connector and an unlocked position. The body and the locking sleeve are movable with respect to each other between a tab unlocking position and a tab locking position to lock said locking tabs in said secured position. McNaughton does not disclose a locking sleeve movable with respect to the body between a tab unlocking position and a tab locking position. If the retainer 30 is read as the locking sleeve of the present invention, the retainer is not movable with respect to the body when assembled and furthermore is not movable between a tab unlocking position and a tab locking position. The retainer 30 of McNaughton, once assembled with the housing 24 is held in that assembled position.

The present invention provides such a locking sleeve to allow for the locking of the body to the air conditioner fitting and unlocking the body from the air conditioner fitting. The present invention allows for movement of the locking sleeve from the locked position to the unlocked position and allows ready disconnection of the body from the air conditioner fitting.

Accordingly, it is respectfully submitted that the McNaughton reference does not have each and every element as set forth in claim 1 and that the identical invention is not shown in every detail. The words of a claim must be given their plain meaning.

Claims 2 - 10 depend from claim 1, and are not anticipated by the McNaughton reference for the reasons cited above in connection with claim 1. Furthermore, McNaughton does not disclose at least one locking tab mounted on either the body or the locking sleeve and the other of

the body or the locking sleeve contacts the one locking tab in the locking position to lock the one locking tab in the secured position as claimed in claim 2. In the case of the Examiners reading of the McNaughton parts, the McNaughton housing 24 (body) does not contact the arms 32 (tabs) to lock the arms in the secured position.

Claim 3 is dependent on claim 2 and is not anticipated by the McNaughton reference for the reasons cited above in connection claims 1 and 2. Further, McNaughton does not disclose a raised portion on the one locking tab (arms 32) that is in contact with the other of the body (housing 24) or the locking sleeve (retainer 30) in the locking position to lock the one locking tab in the secured position as required by claim 3. Likewise, claims 4-10 depend from claim 1, and are not anticipated by the McNaughton reference for the reasons cited above in connection claim 1.

Based on the above, it is respectfully submitted that the McNaughton reference does not have each and every element as set forth in claims 1 - 10, and that the identical invention is not shown in every detail. Accordingly, it is submitted that claims 1 - 10 are in condition for allowance.

Claim 12 and Dependent Claims 13-21

Claim 12 recites a plastic locking sleeve mounted on a plastic body for selectively locking and unlocking the body to the connector. One of the body or the locking sleeve has at least one locking tab integrally formed therewith, the one locking tab has a hinge portion and a connector engaging lip pivotal about the hinge portion and engagable with the connector. The one locking tab is moveable between a secured position in which said connector engaging lip is engageable by the connector and an unlocked position. The body and the locking sleeve are

movable with respect to each other between a tab unlocking position and a tab locking position to lock the locking tabs in the secured position.

The present invention provides a material transfer device in which the body can readily be connected to or disconnected from the connector. McNaughton does not provide for ready disconnection as is described herein.

McNaughton does not disclose a locking tab that is readily moveable between a secured position in which the connector engaging lip is engageable by the connector and an unlocked position. The McNaughton fitting has arms 32 which are forced outwardly when upset portion 34 of the tube 22 forces them outwardly as the tube is moved towards the fully assembled position which is shown in Fig. 6. When the tube and arms are in the fully assembled position, the ends of the arms 32 are adjacent the upset portion 34 and the fitting and tube are not readily detachable. McNaughton does not show any device to move the arms to an unlocked position. In fact, there is no disclosure in McNaughton of detaching the fitting and tube or moving the arms 32 from a locking to an unlocked position. The present invention provides for ready detachment by providing for the movable sleeve claimed in Claim 12.

Claim 12 also provides a body and locking sleeve that are movable with respect to each other between a tab unlocking position and a tab locking position to lock the locking tabs in the secured position. The present invention provides for movement of the locking sleeve with respect to the body from the locked position to the unlocked position and allow ready disconnection of the body from the fitting.

McNaughton does not disclose a locking sleeve movable with respect to the body between a tab unlocking position and a tab locking position. If the retainer 30 is read as the

locking sleeve of the present invention, the retainer is not movable with respect to the body and furthermore is not movable between a tab locking position and a tab unlocking position. The retainer of McNaughton, once assembled with the housing 24, is held in that assembled position.

Accordingly, it is respectfully submitted that the McNaughton reference does not have each and every element as set forth in claim 12 and that the identical invention is not shown in every detail.

Claims 13 - 21 depend from claim 12, and are not anticipated by the McNaughton reference for the reasons cited above in connection with claim 12. Furthermore, McNaughton does not disclose at least one locking tab mounted on either the body or the locking sleeve and the other of the body or the locking sleeve contacts the one locking tab in the locking position to lock the one locking tab in the secured position as claimed in claim 13. Claim 14 is dependent on claim 13 and is not anticipated by the McNaughton reference for the reasons cited above in connection claims 12 and 13. Further, McNaughton does not disclose a raised portion on the one locking tab that is in contact with the other of the body or the locking sleeve in the locking position to lock the one locking tab in the secured position as required by claim 14. Likewise, claims 15-21 depend from claim 1, and are not anticipated by the McNaughton reference for the reasons cited above in connection claim 12.

Based on the above, it is respectfully submitted that the McNaughton reference does not have each and every element as set forth in claims 12 - 21, and that the identical invention is not shown in every detail. Accordingly, it is submitted that claims 12 - 21 are in condition for allowance.

Claim 23 and Dependent Claim 24

Independent claim 23 and dependent claim 24 have been rejected as anticipated by McNaughton as the method claimed would be inherent during the normal use, assemblage and operation of the device. As stated above, for a claim to be anticipated by a prior art reference, the reference must have each and every element as set forth in the claim. The identical invention must be shown in every detail. Moreover, the words of a claim must be given their plain meaning.

Claim 23 provides a method of assembling a material transfer quick connect fitting device. McNaughton does not provide the following which is claimed in claim 23.

- A. A central aperture of the locking sleeve partially receiving the outer surface of the body during the assembly process,
- B. A locking sleeve having prongs formed integrally therewith which are deformed by contact with the outer surface of the body during the assembly process,
- C. A body having a locking tab formed integrally therewith, or
- D. The locking sleeve is spaced from the locking tab when the prongs are in a depression in the body.

In the January 24, 2003 Office Action, The Examiner referred to the housing 24 as the one piece plastic body of the present invention, the retainer 30 as the plastic locking sleeve of the present invention, and the arms 32 as the tabs for locking engagement with a fitting 22.

Element A When considering these elements, with respect to McNaughton and Element A above, the central aperture of the retainer 30 (locking sleeve) is not partially receiving the outer

surface of the housing 24 (body) during the assembly process. In fact, the central aperture of the retainer 30 is located inside the housing 24 both as it is assembled and after assembly.

Element B Likewise, McNaughton does not have the above Element B of the present invention as claimed in claim 23. Element B of the present invention provides a locking sleeve having prongs formed integrally therewith which are deformed by contact with the outer surface of the body during the assembly process. McNaughton does not have any prongs that are deformed by contact with the outer surface of the body. The retainer 30 (locking sleeve) is positioned inside the housing 24 (body).

Element C Likewise, McNaughton does not have the above Element C of the present invention as claimed in claim 23. Element C of the present invention provides a body having a locking tab formed integrally therewith. McNaughton shows the arms 32 (locking tabs) formed on the retainer 30 (plastic locking sleeve) and the housing 24 (body) does not have any locking tabs formed integrally therewith.

Element D McNaughton does not have the above Element D of the present invention as claimed in claim 23. Element D of the present invention provides that the locking sleeve is spaced from the locking tab when the prongs are in a depression in the body. Since the arms 32 (locking tabs) are formed on the retainer 30 (plastic locking sleeve) as shown in McNaughton, the retainer 30 (plastic locking sleeve) cannot be spaced from the arms 32 (locking tabs) as required in claim 23. Claim 24, as amended, depends from claim 23, and is not anticipated by the McNaughton reference for the reasons cited above in connection with claim 23.

Based on the above, it is respectfully submitted that the McNaughton reference does not have each and every element as set forth in claims 23 and 24, and that the identical invention is

not shown in every detail. Accordingly, it is submitted that claims 23 and 24 are in condition for allowance.

Claim 27

Independent claim 27 has been rejected as anticipated by McNaughton as the method claimed would be inherent during the normal use, assemblage and operation of the device. As stated above, for a claim to be anticipated by a prior art reference, the reference must have each and every element as set forth in the claim. The identical invention must be shown in every detail. Moreover, the words of a claim must be given their plain meaning.

Claim 27 provides a method of attaching a material transfer quick connect fitting device to the connector on an automotive air conditioning system. McNaughton does not provide the following Elements which are claimed in claim 27.

A. Moving the fitting and the connector together to pivotally move the connector engaging lip of a locking tab formed integrally with a plastic body of the quick connector into engagement with a depression in the air conditioning connector so that the fluid passageways of the fitting and the connector are in fluid communication with each other.

B. Moving the locking collar of the quick connect fitting along the body of the fitting to contact the connector engaging lip and lock the connector engaging lip in the depression of the connector.

In the January 24, 2003 Office Action, the Examiner referred to the housing 24 as the one piece plastic body of the present invention, the retainer 30 as the plastic locking sleeve of the present invention, and the arms 32 as the tabs for locking engagement with a fitting 22. With respect to Element A, the arms 32 (locking tabs) are not formed integrally with the housing 24

(body). With respect to Element B, the retainer 30 (locking collar) is not movable with respect to the housing 24 (body). In fact McNaughton does not provide any locking collar of the quick connect fitting for movement along the body of the fitting to contact the connector engaging lip and lock the connector engaging lip in the depression of the connector.

Based on the above, it is respectfully submitted that the McNaughton reference does not have each and every element as set forth in claim 27, and that the identical invention is not shown in every detail. Accordingly, it is submitted that claim 27 is in condition for allowance.

Claim Rejection - 35 USC §103

Claim 28

Claim 28 depends from claim 27 and is rejected under USC §103(a) as being unpatentable over McNaughton in view of Strybel. As described above, McNaughton does not have Elements A and B as described above with respect to claim 27 from which claim 28 depends.

Strybel also does not provide Elements A and B (described above with respect to claim 27).

Element A Moving the fitting and the connector together to pivotally move the connector engaging lip of a locking tab formed integrally with a plastic body of the quick connector into engagement with a depression in the air conditioning connector so that the fluid passageways of the fitting and the connector are in fluid communication with each other. Strybel does not provide a locking tab formed integrally with the body of the quick connector. Strybel also does not show a locking tab that engages a depression in an air conditioning connector.

Element B Moving the locking collar of the quick connect fitting along the body of the fitting to contact the connector engaging lip and lock the connector engaging lip in the depression of the connector. Strybel does not provide any locking collar of the quick connect fitting for moving along the body of the fitting to contact the connector engaging lip and lock the connector engaging lip in the depression of the connector. Even if one attempted to read the latch finger 50 mounted on the connector shown in Stryble as having a connector engaging lip, there is no locking collar of the quick connect fitting for moving along the body of the fitting to contact the connector engaging lip and lock the connector engaging lip in the depression of the connector.

Neither the McNaughton or Stryble references teach a locking collar of the quick connect fitting for moving along the body of the fitting to contact the connector engaging lip and lock the connector engaging lip in the depression of the connector.

Based on the above, it is respectfully submitted that the method of attaching a material transfer quick connect fitting device to the connector on an automotive air conditioning system claimed in claim 28 is not obvious over McNaughton in view of Strybel. Neither of these references have Elements A or B. Accordingly, it is submitted that claim 28 is in condition for allowance.

Conclusion

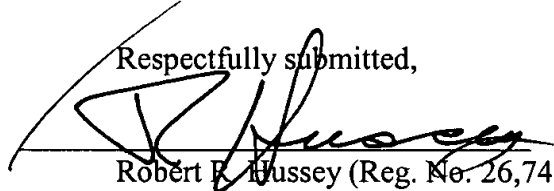
It is respectfully submitted that the allowable subject matter indicated by the Examiner in the Office Action dated January 24, 2003 has been defined in newly presented claims 30-33 and the objections to claims 1-10, 12-21 and 23-29 as amended, have been overcome and that the claims of this Application clearly and patentably define over the references of record. Therefore,

it is respectfully requested that the claims as amended by this amendment be allowed and this application be passed to issue.

If for any reason the Examiner believes that a telephone conference would expedite the prosecution of this application, the Examiner is respectfully requested to call Applicants' attorney in Cleveland, Ohio, at (216) 687-1111.

Date: June 20, 2003

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

Changes to the claims:

24. (Once Amended) A material transfer quick connect fitting device [product] made by the method as claimed in claim 23.